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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/829,584	KAUFFMAN ET AL.	
	Examiner	Art Unit	
	Blaine Basom	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-38,40-50,77,80,83,89-91,96,99,102 and 106-108* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-38,40-50,77,80,83,89-91,96,99,102 and 106-108* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to the Applicants' submission, received on October 7, 2008, in which independent claims 26, 47, 49, and 77 are amended, claims 1-25, 51-76, 78-79, 81-82, 84-88, 92-95, 97-98, 100-101, 103, and 105 are cancelled, and new claims 106-108 are added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26-29, 31-38, 40-50, 77, 80, 83, 89-91, 96, 99, 102, and 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,211,869 to Loveman et al. (hereafter "Loveman"), over U.S. Patent No. 6,414,725 to Clarin et al. (hereafter "Clarin"), over U.S. Patent No. 6,134,378 to Abe et al. (hereinafter "Abe"), and also over U.S. Patent No. 6,065,050 to DeMoney (hereinafter "DeMoney"). In general, Loveman describes a "digital multimedia system," which is used by journalists and editors to create news stories that are comprised of video, text, and graphics (for example, see column 4, lines 28-39). Such a digital multimedia system is considered a "content production system" like that of the claimed invention.

Specifically regarding claim 26, the content production system of Loveman comprises:

1. an ingest system for receiving content in an initial format and for reformatting the received content into content having a first format with a lower resolution and content having a second format with a higher resolution: Loveman discloses that the above-described digital multimedia system comprises a "multimedia capture and encoding system" which receives content in an initial format and reformats the received content into a first version having a first format and into a second version having a second format, wherein the second version has a higher resolution than the first version (see column 4, lines 28-46; column 13, lines 14-20; and column 14, lines 13-22).

2. storage for storing the lower resolution content in a fast access storage and higher resolution content in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage: Loveman discloses that the two versions of the multimedia content are stored in a "multimedia storage system" (see column 4, lines 47-55). The lower resolution content is particularly stored in a "multimedia archive system" (see column 17, lines 14-22; and column 15, lines 30-59), and the higher resolution content is stored in a "media server" (see column 20, lines 19-39; and column 12, line 49 – column 13, line 14). Loveman discloses that the media server is a high-capacity server, comprising the ability to maintain the higher resolution content in

near-line and off-line storage, such as on tape or optical disks (see column 12, line 49 – column 13, line 14). Additionally, Loveman discloses that the multimedia archive system, which is part of a "core newsroom system," may be accessed through a faster network than the media server, which is part of a "video production system" (for example, see column 12, lines 18-34). Because of these different network speeds, because tape storage requires a relatively large access time, and because the higher resolution content requires more bandwidth than the lower resolution content (for example, see column 7, lines 53-54), it is understood that the content stored on the multimedia archive is accessed more quickly than the content stored on the media server. Loveman thus discloses storage for storing the lower resolution content in fast access storage, specifically a multimedia archive, and storage for storing the higher resolution content in high capacity storage, specifically a media server, whereby the fast access storage is accessible more quickly than the high capacity storage.

3. an edit station for selecting a portion of content from the lower resolution content: Loveman discloses that the digital multimedia system also comprises a "video editing and playback system," which is used to generate a composition using a selected portion of the content having a lower resolution (see column 4, line 56 – column 5, line 4; and column 17, lines 43-54).

4. a retrieval apparatus for receiving a description of the selected portion from the edit station and retrieving a portion of content from the

higher resolution content corresponding to the selected portion: Loveman discloses that the "video editing and playback system" is used to generate a composition using a selected portion of the content having a low resolution, and retrieve and play back the composition using the corresponding portion of the content having a higher resolution (see column 4, line 56 – column 5, line 4; and column 17, lines 43-54). Such a video editing and playback system is consequently understood to entail receiving description of the selected portion of lower resolution content and retrieving a portion of the higher resolution content corresponding to this selected portion.

5. wherein timecodes identifying corresponding portions of the lower resolution content and higher resolution content are stored with the lower resolution and higher resolution content, respectively: Loveman suggests that timecodes are stored with each of the lower resolution and higher resolution content, the timecodes for identifying portions of the content (see e.g. column 6, lines 31-67).

Loveman thus teaches a method similar to that of claim 26. However, Loveman does not explicitly describe a third format of the content, the third format having a lowest resolution and being stored in the fast access storage, as is claimed.

Nevertheless, Loveman discloses that the edit station comprises a graphical user interface including a "storyboard window," by which a user generates a sequence of "clips," each clip representing a portion of the low resolution content (see figure 11, and its associated description at column 17, line 55 – column 18, line 61). These clips, each

depicted as a small rectangular object showing a frame of the corresponding low resolution content, may be selected in order to play its corresponding low resolution content (see column 18, lines 11-25; column 18, lines 47-55; and figure 11). It is notoriously well-known in the art of video editing to implement such clips as thumbnails, which have size and resolution that is lower than the content that they represent. The Examiner takes OFFICIAL NOTICE of this teaching.

Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Loveman at the time the invention was made, to modify the storyboard window of Loveman to implement thumbnails for each of the clips. One would have been motivated to use such thumbnails because of their widespread use and because they are standard means for representing video data, as is known in the art. To generate such thumbnails, it is understood that the above-described ingest system of Loveman additionally reformats the initial content into content having a third format with a lowest resolution, i.e. the resolution for the thumbnails, whereby this third format of the content is stored with the lower resolution content in fast access storage, so that it may be retrieved and displayed and used to access the lower resolution content at the edit station. Loveman thus teaches – to one of ordinary skill in the art – a method like that of claim 26. However, while Loveman discloses that the edit station is connected to a multimedia storage system via a network to "browse" and select a portion of the lower resolution content (for example, see column 5, lines 5-62; column 7, lines 1-37; and column 17, lines 43-64), Loveman does not explicitly disclose that the edit station comprises a browser to select portions of the lower resolution content, as is expressed in claim 26. Loveman also does not explicitly describe a verification process performed on the

portions of lower resolution content and higher resolution content, the verification process comprising: reviewing a frame of the lower resolution content and inputting a corresponding timecode associated with the frame of the lower resolution content by a user, wherein the reviewed frame and the input timecode are compared with a second frame and corresponding timecode to obtain a frame number of the higher resolution content, as is further recited in claim 26.

Like Loveman, Clarin describes a system for receiving content in an initial format, and for reformatting the content into content having a first format and content having a second format, wherein the second format has a higher resolution than the first format (see column 2, line 60 – column 4, line 24). Clarin additionally describes an edit station for selecting and specifying a portion of the low resolution content, which like that of Loveman, is stored remotely over a network (see column 4, lines 40-64). Specifically regarding the claimed invention, Clarin teaches that such an edit station may implement a browser to select a portion of the low resolution content (see column 4, lines 25-39).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Loveman and Clarin before him at the time the invention was made, to modify the edit station taught by Loveman, such that it includes the browser of Clarin for searching and selecting portions of lower resolution content. It would have been advantageous to one of ordinary skill to utilize this combination, because such browsers are inexpensive, readily available, and provide a familiar graphical user interface, as is taught by Clarin (see column 4, lines 25-39). Accordingly, Loveman and Clarin teach a method similar to that of claim 26. Loveman and Clarin, however, do not explicitly teach

a verification process performed on the portions of lower resolution content and higher resolution content, the verification process comprising: reviewing a frame of the lower resolution content and inputting a corresponding timecode associated with the frame of the lower resolution content by a user, wherein the reviewed frame and the input timecode are compared with a second frame and corresponding timecode to obtain a frame number of the higher resolution content, as is required by claim 26.

Nevertheless, Abe describes a content production system whereby the user inputs a timecode associated with a frame of video content in order to review the frame of content (see e.g. column 1, lines 12-20; and column 14, line 40 – column 15, line 15). Abe thereby discloses that the user reviews a frame of content, and inputs a timecode associated with the frame of content (i.e. to access and display the frame), like claimed.

It would have been obvious to one of ordinary skill in the art, having the teachings of Loveman, Clarin, and Abe before him at the time the invention was made, to modify the edit station taught by Loveman and Clarin, such that it includes a feature allowing the user to review a frame of content (e.g. a frame of lower resolution content) by entering a corresponding timecode associated with the frame of content, like taught by Abe. It would have been advantageous to one of ordinary skill to utilize such a feature, because it allows the user to readily access any given frame of the content, as is demonstrated by Abe (see e.g. column 14, line 40 – column 15, line 15). Accordingly, Loveman, Clarin, and Abe teach a method like that of claim 26. Loveman further suggests that a mapping is created between the higher and lower resolution content, such that by identifying a portion of the lower resolution content, a corresponding portion of higher resolution content can be retrieved (see e.g. column 6, lines 20-67). Loveman does not explicitly

describe how the mapping is created. Loveman, Clarin, and Abe, that is, do not explicitly teach a verification process performed on the portions of lower resolution content and higher resolution content, wherein a reviewed frame of lower resolution content and its associated timecode are compared with a second frame and corresponding timecode to obtain a frame number of the higher resolution content, as is required by claim 26.

Like Loveman, DeMoney teaches a method for mapping (i.e. indexing) between multiple associated video streams (see e.g. column 1, lines 15-20). Such a method entails determining the "normal play time" (NPT) of a particular point (e.g. a frame) within a first video stream, which is done by subtracting the base presentation timestamp at the beginning of the stream (e.g. at the first frame) from the timestamp at that particular point (e.g. frame) (see e.g. column 8, lines 26-58). The NPT of the point can then be applied to determine, via a lookup table, the corresponding point in an associated video stream (see e.g. column 8, line 59 - column 10, line 17). Accordingly, DeMoney teaches comparing the frame and timecode of the particular frame with a second frame and timecode (i.e. with the beginning frame and timecode) to determine the NPT of the particular frame and thereby obtain the frame number (i.e. offset) of a corresponding point within the associated video stream.

It would have been obvious to one of ordinary skill in the art, having the teachings of Loveman, Clarin, Abe, and DeMoney before him at the time the invention was made, to generate the mapping between the versions of the video (i.e. between the higher resolution and lower resolution version) taught by Loveman, Clarin, and Abe using the technique taught by DeMoney, i.e. it would have been obvious, for each frame of the lower resolution version, to determine the NPT of the frame (i.e. by comparing the frame

and timecode with a second frame and timecode) and to index a lookup table to obtain a frame number of the higher resolution version. It would have been advantageous to one of ordinary skill to create such a mapping using NPT, because it permits the location of a particular item of content within a video stream to be determined regardless of presentation rate, encoding scheme, or storage medium, as is suggested by DeMoney (see e.g. column 8, lines 26-45; and column 10, lines 7-17). Consequently, Loveman, Clarin, Abe, and DeMoney are considered to teach a verification process comprising: inputting a timecode associated with a frame of the lower resolution content, by a user, and reviewing the frame of lower resolution content, wherein each of the frames of the lower resolution content and its corresponding timecode (including the reviewed frame and the input timecode) are compared with a second frame and corresponding timecode (i.e. the first frame and timecode of the lower resolution content) to obtain the NPT of the frame and thereby obtain a frame number of associated higher resolution content. Loveman, Clarin, Abe, and DeMoney thus teach – to one of ordinary skill in the art – a method like that of claim 26, which is for producing content.

Regarding claims 27 and 28, Loveman discloses that the above-described first version of the reformatted multimedia content is a low resolution version, and that the above-described second version of the reformatted multimedia content is a high resolution version (for example, see column 4, lines 28-39). Moreover, Loveman discloses that each version comprises digitized video content (see column 14, lines 13-22; and column 13, lines 14-37). It is therefore understood that the first version comprises low-resolution digitized video content, and that the second version comprises high resolution digitized video content.

As per claim 29, Loveman discloses that the above-described first version of the reformatted multimedia content may be an MPEG-1 encoded stream (see column 5, line 63 – column 6, line 19). Thus the first version is considered to comprise "MPEG1," as is expressed in claim 29.

With respect to claims 31 and 32, Loveman discloses that the above-described multimedia capture and encoding system is connected to a network, which is used for transmitting data (see column 5, lines 19-34; column 14, lines 13-22; and column 13, lines 14-20). This multimedia capture and encoding system, which is considered an ingest system as described above, is therefore understood to be "web-based" like recited in claim 31. Moreover, Loveman discloses that the above-described video editing and playback system is connected to a network, which is used for sending and receiving data (see column 5, lines 19-34; column 5, lines 50-62; and column 16, line 64 – column 17, line 11). Therefore, this video editing and playback system, which is understood to comprise an edit station as is described above, is also considered "web-based." Since the ingest system and edit station are both web based, the method taught by Loveman, Clarin, Abe, and DeMoney, which comprises these systems, is also considered web based as recited in claim 32.

In reference to claims 33 and 34, Loveman discloses that the above-described first version of the multimedia content, which is of lower resolution than the second version, is stored in fast access storage during editing. Specifically, the version is stored in disk storage (for example, see column 8, lines 18-40).

In regard to claim 35, Loveman discloses that the above-described second version of the multimedia content, which is of higher resolution than the first version, may be stored on tape storage (for example, see column 12, lines 49-60).

Referring to claim 36, the multimedia capture and encoding system disclosed by Loveman receives content in an initial format and reformats the received content into a first version having a first format and a second version having a second format, wherein the second version has a higher resolution than the first version, as is described above. Loveman particularly discloses that this multimedia capture and encoding system comprises a "media recorder" (see column 14, lines 13-22), which receives the multimedia content in its initial format, and *digitizes* and compresses the content into the first and second versions (see column 13, lines 14-37). Since the initial format is *digitized*, or in other words, converted from an analog to a digital format, it is understood that the initial format prior to this digitization is analog.

Concerning claims 37 and 38, Loveman discloses that metadata may be added to the stored multimedia content (see column 19, lines 21-63). It is therefore understood that the digital multimedia system of Loveman comprises an apparatus for adding metadata to the stored content. Specifically regarding claim 38, Loveman discloses that such metadata may comprise "user defined elements," or in other words, user input (see column 19, lines 48-56).

In regard to claims 40 and 41, Loveman discloses that timecodes identifying corresponding portions of the above-described first and second versions are stored with the first and second versions, respectively (see e.g. column 20, lines 19-39). The

timecodes associated with the selected portion of the first version, i.e. lower resolution version, are used to retrieve the corresponding portion of the second version, i.e. higher resolution version (see column 20, lines 19-39). Moreover, Loveman presents a graphical user interface used to create compositions of the multimedia data, wherein the timecodes associated with the first version are displayed with the images of the first version (see column 18, lines 11-25; and reference number 516 in figure 11). Loveman does not explicitly disclose that the time codes are "superimposed" on the images, as is claimed. Nevertheless, it is notoriously well-known in the art to superimpose timecodes on video images. The Examiner takes OFFICIAL NOTICE of this teaching. Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Loveman at the time the invention was made, to superimpose timecodes on each of the low resolution video images. One would have been motivated to superimpose such timecodes because such timecodes provide useful information while viewing video, as known in the art. By superimposing such timecodes, the timecodes may be viewed using any type of playback devices. To superimpose such timecodes, it is understood that there necessarily exists some mechanism which superimposes the timecodes over the individual frames of the lower resolution content. Such a mechanism is considered part of the ingest system, which formats initial content into the lower resolution content.

In reference to claims 42-46, the video editing and playback system of Loveman, Clarin, Abe, and DeMoney is understood to comprise an edit station, which is used to select a portion of content from the low resolution version of the multimedia content, as is described above. Loveman particularly discloses that such an edit station comprises software for searching the lower resolution content based on user specified criteria (see

column 17, lines 44-64). Moreover, Loveman discloses that the edit station provides an interface for viewing the lower resolution content and selecting portions therefrom (see column 18, lines 47-55). Also provided by the user interface of the edit station is a "storyboard window," which allows users to create a sequence of selected video clips in order to produce a news story (see column 18, lines 47-55). As this storyboard window allows clips to be laid out in sequence, according to the user's desire, it is interpreted that the sequence can be modified until the user is satisfied with the sequence. Thus the edit station of Loveman is understood to further comprise software for creating a list of selected portions of the lower resolution content, whereby this list may be modified. Lastly, Loveman discloses that this list may be provided to the above-described retrieval apparatus, i.e. "video editor," which retrieves and displays clips of higher resolution content corresponding to the list (see column 18, line 56 – column 19, line 20). Thus the description sent to the retrieval apparatus comprises this list.

With respect to claims 99 and 102, Loveman describes a journalist workstation, part of the above-described "video editing and playback system," which is used to generate a composition using a selected portion of the content having a low resolution, and retrieve and play back the composition using the corresponding portion of the content having a higher resolution (see column 4, line 56 – column 5, line 4; and column 17, lines 43-54). This journalist workstation comprises a graphical user interface with a storyboard window, which as described above, may display a plurality of thumbnails representing portions of the low resolution content (see column 17, line 55 – column 18, line 25). As further described above, these thumbnails are considered a third version of the initial content, and are considered to exist in a third format, having a lowest

resolution. Accordingly, this third format is understood to comprise thumbnail representations of the low resolution content, which like recited in claim 99, is used as metadata describing the low resolution content. Loveman discloses that these thumbnails may be arranged in a sequence, whereby the low resolution content corresponding to the thumbnails may be displayed to the user according to the sequence (for example, see column 18, lines 46-55). Such a sequence is considered a "storyboard" like described in claim 102. Consequently, the above-described combination of Loveman, Clarin, and Abe is considered to teach that selecting a portion of content from the lower resolution content comprises searching the lower resolution content, reviewing the content having the third format, i.e. thumbnails, as metadata of the content having the lower resolution format, and preparing a storyboard using the content having the third format.

In regard to claims 47 and 49, Loveman, Clarin, Abe, and DeMoney present a content editing system, method, and program product wherein multimedia content is reformatted into a plurality of versions having different resolutions, wherein lower and lowest resolution versions are stored in a fast access storage, and a higher resolution version is stored in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage, and wherein timecodes identifying corresponding portions of the lower resolution and higher resolution content are stored with the lower resolution and higher resolution content, respectively, as is described above (see e.g. the rejection for claim 26). As further described above (see e.g. the rejection for claim 26), Loveman, Clarin, Abe, and DeMoney teach a verification process comprising: inputting a timecode associated with a frame of the lower resolution content, by a user, and reviewing the frame of lower resolution content, wherein each of the

frames of the lower resolution content and its corresponding timecode (including the reviewed frame and the input timecode) are compared with a second frame and corresponding timecode (i.e. the first frame and timecode of the lower resolution content) to obtain a frame number of associated higher resolution content. Moreover, Loveman describes enabling selection of a portion of the lower resolution content: a multimedia archive server provides the low resolution content to a content editing application implemented on a journalist workstation, whereby selected portions of the content may be viewed and edited (see column 16, line 64 – column 17, line 11; and column 17, line 44 – column 18, line 60 of Loveman). Loveman discloses that a plurality of such journalist workstations may be in communication with the multimedia archive server (see column 14, lines 35-45), each workstation implementing the content-editing application to search, view, and select portions of the low resolution content and from the selected portions, create an edit list for use in retrieving corresponding portions of the high resolution content (see column 16, line 64 – column 17, line 11; and column 17, line 44 – column 19, line 20). Accordingly, Loveman, Clarin, Abe, and DeMoney are further considered to teach content editing methods like recited in claims 47 and 49.

With respect to claims 48 and 50, Loveman discloses that the above-described edit list is sharable with other journalist workstations, i.e. clients, through the multimedia archive server (see column 18, lines 47-60).

In regard to claim 77, Loveman, Clarin, Abe, and DeMoney present a content editing system, method, and program product wherein multimedia content is reformatted into a three versions having different resolutions, wherein the lower and lowest resolution versions are stored in a fast access storage, and a higher resolution version is stored in a

high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage, and wherein timecodes identifying corresponding portions of the lower resolution and higher resolution content are stored with the lower resolution and higher resolution content, respectively, as is described above (see e.g. the rejection for claim 26). As further described above (see e.g. the rejection for claim 26), Loveman, Clarin, Abe, and DeMoney teach a verification process comprising: inputting a timecode associated with a frame of the lower resolution content, by a user, and reviewing the frame of lower resolution content, wherein each of the frames of the lower resolution content and its corresponding timecode (including the reviewed frame and the input timecode) are compared with a second frame and corresponding timecode (i.e. the first frame and timecode of the lower resolution content) to obtain a frame number of associated higher resolution content. Moreover, Loveman describes enabling selection of a portion of the lower (i.e. middle) resolution content: a multimedia archive server provides the lower resolution content to a content editing application implemented on a journalist workstation, whereby selected portions of the content may be viewed and edited (see column 16, line 64 – column 17, line 11; and column 17, line 44 – column 18, line 60 of Loveman). Loveman further describes receiving a description of the selected portion of content and retrieving a portion of content from another of the content formats stored in the high capacity storage corresponding to the selected portion: Loveman discloses that a plurality of such journalist workstations may be in communication with the multimedia archive server (see column 14, lines 35-45), each workstation implementing the content-editing application to search, view, and select portions of the low resolution content and from the selected portions, create an edit list for use in

retrieving corresponding portions of the high resolution content (see column 16, line 64 – column 17, line 11; and column 17, line 44 – column 19, line 20). Accordingly, Loveman, Clarin, Abe, and DeMoney are further considered to teach a method for producing content like recited in claim 77.

With respect to claim 80, Loveman describes a verification process to determine the correspondence between the above-described first version of the multimedia content, and the above-described second version of the multimedia content (for example, see column 6, lines 31-67). This verification is particularly done by a "capture manager," which is part of the above-described ingest system of Loveman (see column 5, lines 35-43, and column 6, lines 31-67). Consequently, it is understood that the above-described system of Loveman, Clarin, Abe, and DeMoney, which comprises such a capture manager, performs the verification process described in claim 80.

Concerning claim 83, Clarin teaches that for an encoded multimedia data stream to be displayed to the user, the encoded data must be converted into an audio and video format (see column 4, lines 24-39). Consequently, it is understood that the playback system, i.e. retrieval apparatus described by Loveman, which is used for retrieving and displaying a portion of encoded, high-resolution multimedia content for final editing (for example, see column 4, line 56 – column 5, line 4; and column 7, lines 1-23), inherently converts the encoded content into a fourth format, specifically an audio and video format, such that the multimedia content can be viewed for final editing.

With respect to claims 89-91 and 96, Loveman discloses that the multimedia archive, which as described above is considered fast access storage, comprises a "library

server" used to catalog and retrieve low resolution content (see column 15, lines 30-59). Additionally, Loveman discloses that the low resolution content may be transmitted from the server via a stream, that it may be displayed at the user's computer as it is delivered (for example, see column 9, lines 9-35). Clarin similarly teaches streaming low resolution content from a server (see column 4, lines 24-39). Consequently, the above-described multimedia archive of Loveman, Clarin, Abe, and DeMoney is considered a digital library with media streaming capability.

Regarding claims 106-108, Loveman, Clarin, Abe, and DeMoney teach a verification process comprising: inputting a timecode associated with a frame of the lower resolution content, by a user, and reviewing the frame of lower resolution content, wherein each of the frames of the lower resolution content and its corresponding timecode (including the reviewed frame and the input timecode) are compared with a second frame and corresponding timecode (i.e. the first frame and timecode of the lower resolution content) to obtain a frame number of associated higher resolution content, as is described above (see e.g. the rejection for claim 26). DeMoney particularly teaches associating two versions of content by first determining the "normal play time" (NPT) of a particular point (e.g. a frame) within a first version of content, which is done by subtracting a frame number (i.e. a base presentation timestamp) from at the beginning of the content (e.g. at the first frame) from the frame number (i.e. timestamp) at that particular point (e.g. frame) (see e.g. column 8, lines 26-58). The NPT of the point can then be applied to determine, via a lookup table, the corresponding point in the associated version of content (see e.g. column 8, line 59 - column 10, line 17). Accordingly, the above described combination of Loveman, Clarin, Abe, and DeMoney further teaches

reviewing a frame of lower resolution content, wherein the frame number (i.e. timecode) of each of the frames of the lower resolution content (including the reviewed frame) is compared with a frame number (i.e. timecode) of a second frame (i.e. a first frame), wherein the second frame is a predetermined frame (e.g. a first frame) of the lower resolution content, and wherein the comparison is used to obtain a timecode delta (i.e. an NPT), which is applied to the higher resolution content to obtain the frame number of the higher resolution content, as is claimed.

Claims 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Loveman, Clarin, Abe, and DeMoney, which is described above, and also over the "VideoUniversity.com" website (which is hereafter referred to as "VideoUniversity"). As shown above, Loveman, Clarin, Abe, and DeMoney present a method like that recited in claim 26. Loveman particularly describes a multimedia capture and encoding system, i.e. ingest system, which receives content in an initial format and reformats the received content into a first version having a first format and a second version having a second format, wherein the second version has a higher resolution than the first version (see column 4, lines 28-46; column 13, lines 14-20; and column 14, lines 13-22). As shown above, Loveman teaches that the format of this first version may comprise MPEG1. Moreover, Loveman discloses that the format of this second version may comprise MJPEG, such that it is of television broadcast quality (see column 6, lines 3-19). Loveman therefore does not explicitly disclose that the format of the second version comprises MPEG2, as is recited in claim 30. Similarly, Clarin, Abe, and DeMoney fail to teach that the format of the second version comprises MPEG2.

Like Loveman and Clarin, VideoUniversity discusses video editing, and more specifically, presents several video-editing systems (for example, see page 1). Regarding the claimed invention, VideoUniversity discloses that, "while MJPEG is excellent for delivering fantastic video quality out to tape, it is a poor choice for multimedia" (see page 3). As described above, the content production system taught by Loveman is used to capture and edit multimedia content. Moreover, VideoUniversity describes MPEG2 based video compression and compares it with MJPEG, stating that, "… the quality of [these] MPEG2 based cards is outstanding. MPEG2 is a much more efficient compression than MJPEG, so you can maintain video quality at ½ the data rate!!" (see the bottom of page 3).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Loveman, Clarin, Abe, DeMoney, and VideoUniversity before him at the time the invention was made, to modify the multimedia capture and encoding system of Loveman, Clarin, Abe, and DeMoney such that instead of reformatting the initial content into an MJPEG format, it reformats the content into an MPEG2 format, as is taught by VideoUniversity. It would have been advantageous to one of ordinary skill to utilize such a combination because MPEG2 provides similar quality to that of MJPEG at a lower data rate, as is taught by VideoUniversity.

Response to Arguments

The Examiner acknowledges the Applicants' amendments to independent claims 26, 47, 49, and 77, the Applicants' cancellation of claims 1-25, 51-76, 78-79, 81-82, 84-88, 92-95, 97-98, 100-101, 103, and 105, and the Applicants' addition of new claims 106-108.

Regarding the pending claims, the Applicants argue that Loveman, Clarin, and Abe fail to teach "wherein a verification process is performed on the portions of the lower resolution and higher resolution content, the verification process comprising: reviewing a frame of the lower resolution content and inputting a corresponding timecode associated with the frame of the lower resolution content, by a user, wherein the reviewed frame and the input timecode are compared with a second frame and corresponding timecode to obtain a frame number of the higher resolution content," as is now recited in independent claim 26 and similarly expressed by independent claims 47, 49, and 77. In response, the Examiner respectfully presents the U.S. Patent to DeMoney, which when combined with the teachings of Loveman, Clarin, and Abe, teaches such a verification process, as is described hereinabove (see e.g. the rejection for claim 26). Accordingly, the Applicants' arguments with respect to the pending claims have been considered, but are moot in view of the new grounds of rejection required in response to the Applicants' amendments.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571)272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kieu Vu can be reached on (571)272-4057. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BTB/
2/15/2009

/Kieu D Vu/
Primary Examiner, Art Unit 2175